



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,579	04/16/2004	Qiuzhen Zou	010093U1C1	1769
23596 7590 12/26/2008 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121				
EXAMINER HARRELL, ROBERT B				
ART UNIT		PAPER NUMBER		
2442				
NOTIFICATION DATE		DELIVERY MODE		
12/26/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com

kascanla@qualcomm.com

nanm@qualcomm.com

Office Action Summary

Application No.

10/826,579

Applicant(s)

ZOU ET AL.

Examiner

Robert B. Harrell

Art Unit

2442

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
4a) Of the above claim(s) 1-17, 27-30, 33 and 43-46 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 18-26, 31, 32 and 34-42 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 29 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20080925 and 20080930.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☒ Other: see attached Office Action.

Art Unit: 2442

1. Claims 18-26, 31, 32, and 34-42 remain presented for examination with all others withdrawn as being drawn to non-elected claims.

2. The applicant's 14 October 2008 election, without traverse, of Group II (claims 18-26, 31, 32, and 34-42) is hereby acknowledged. The restriction requirement mailed 22 September 2008 is hereby incorporated in this FINAL Office Action by reference and maintained and also made FINAL.

3. All arguments, to date, directed to all previous rejections, and grounds for rejections, have been fully considered but deemed moot in light of the following new rejections, and grounds for rejections, as presented herein this FINAL Office Action below. Hence, all previous rejections, and grounds for rejections, are hereby vacated and replaced by following new rejections, and grounds for rejections, as presented herein this FINAL Office Action in light of the applicant's 14 October 2008 election of the newly file 05 February 2008 claims 18-46.

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are now directed.

5. The first page of the specification of this application must mention United States Patent Application S. N. 10/236,657, 10/967,007, and 10/987,123 as related applications along with United States Patent Number: 6,760,772.

6. The applicant should always use this period for response to thoroughly and very closely proof read and review the whole of the application for correct correlation between reference numerals in the textual portion of the Specification and Drawings along with any minor spelling errors, general typographical errors, accuracy, assurance of proper use for Trademarks TM, and other legal symbols ®, where required, and clarity of meaning in the Specification, Drawings, and specifically the claims (i.e., *provide proper antecedent basis for "the" and "said" within each claim*) with each claim ending in a period. Minor typographical errors could render a Patent unenforceable and so the applicant is strongly encouraged to aid in this endeavor.

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 18-26, 31, 32, and 34-42 are rejected under 35 U.S.C. 101 because the claimed invention, in light of the specification, encompasses non-statutory subject matter since such reads on (encompass) software or program per se' (In re Beauregard (CAFC) 35 USPQ2d 1383) and MPEP 2106 (New EXAMINATION GUIDELINES FOR COMPUTER-RELATED INVENTIONS). Even though drafted as "A method", each of the recited elements encompass their software or program per se' equivalent; thus, the whole of the method encompasses pure

Art Unit: 2442

software or program per se; unlike "A method executing on a hardware". Also, while a hardware device claim, with functional acts, may inherently encompass a corresponding method, the same does not hold in the reverse since a corresponding method is broader in scope and can encompass a scope void of any hardware. Per the computer program product, such encompasses a carrier wave or transmission medium (carrier waves store data for the duration of transmission over a period of time and is thus storage) since each are computer readable mediums; unlike a "hardware computer readable program storage medium".

9. The following is a quotation of the second paragraph of 35 U.S.C 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 18-26, 31, 32, and 34-42 are rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The scope of meaning of the claim language is not clear since it cannot be clearly ascertained if the claims encompass only hardware, or software, or a combination since there is no clear recital of actual hardware.

11. The non-statutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); In re Van Ornam, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993), In re Berg 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998), 195 F.3d 1322, 1326, 52 USPQ2d (Fed. Cir. 1999), Eli Lilly CAFC on petition for rehearing En Banc (58 USPQ2d 1869).

12. A timely filed terminal disclaimer in compliance with 37 C.F.R. 1.321 (c) may be used to overcome an actual or provisional rejection based on a non statutory based double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. 1.130(b). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 C.F.R. 3.73(b).

13. Claims 18-26, 31, 32, and 34-42 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 71-91 of United States Patent 10/987,123. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 71-91 of United States Patent 10/987,123 contains every element of the claims in this instant application and as such is encompassed by the claims of this instant application.

Art Unit: 2442

14. New added claims 18-26, 31, 32, and 34-42 limitations directed to shut down packets, hibernation, high impedance and the like finds support in this application starting with page 38 (paragraph [0169]) as an example.

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this action:

A person shall be entitled to a patent unless -

(e) the invention was described in — (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

16. **Claims 24, 25, 26, 32, 40, 41, and 42 are rejected under 35 U.S.C. 102 (e)** as being anticipated by Togawa (United States Patent Number: US 6,715,088).

17. Prior to addressing the grounds of the rejections below, should this application ever be the subject of public review by third parties not so versed with the technology (i.e., access to IFW through Public PAIR (as found on <http://portal.uspto.gov/external/portal/pair>)), this Office action will usually refer an applicant's attention to relevant and helpful elements, figures, and/or text upon which the Office action relies to support the position taken. Thus, the following citations are neither all-inclusive nor all-exclusive in nature *as the whole of the reference is cited* and relied upon in this action as part of the substantial evidence of record. Also, no temporal order was claimed for the acts and/or functions.

18. Per claim 24, Togawa taught a method (e.g., see Title) of placing a digital data interface communication data link (e.g., see figure 4 (54) and/or figure 27 (data link(s) to the Hard Disk 115), and/or figure 36 (data link(s) to the floppy disk 125), and/or figure 29 (data link(s) to the display unit 40)) in a hibernation mode (e.g., see Abstract, figure 9 (ST25) and figure 13B), the method comprising sending a link shut down packet (e.g., see figure 7C) from a host device (e.g., see figure 1 (2)) to a client device (e.g., see figure 1 (3-1 to 3-N)); and, disabling a data driver to a high impedance state by the host device (when current (I) is removed from data drivers, such drivers go into high impedance state by Ohms Law since $R=V/I$ where if there is no current, $I=0$ and $R=Infinity$ [very high impedance]).

Art Unit: 2442

19. Per claim 25, "Z" state maybe interpreted as either binary high ("1") or binary low ("0"), depending on the logic, hence such would encompass when wherein disabling the data driver comprised producing a high impedance state to define a zero logic state while the communication data link is in hibernation.

20. Per claim 26, each of the data drivers in the client produced a series of binary one "1" and binary "0" in a sequence determined by the data transmitted there through and thus the data drivers comprised a strobe driver since an alternating series of "1" and "0" would effectively be a strobe. Also, the type of data to be sent over the data link was a matter of design choice as "F0" (hex) was a normal binary pattern for many binary reasons (i.e., for disk formatting or display clearing function) as well as a binary test pattern.

21. Per claims 32, 40, 41 and 42, these claims do not teach or defined above the correspondingly rejected claims given above, and are thus rejected for the same reasons given above.

22. This application contains claims 1-17, 27-30, 33 and 43-4 6 drawn to an invention nonelected without traverse in the reply filed on 14 October 2008. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144). See MPEP § 821.01.

23. The applicant's 05 February 2008 amendment necessitated the new ground(s) of rejection presented in this FINAL Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

24. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Harrell whose telephone number is (571) 272-3895. The examiner can normally be reached Monday thru Thursday from 5:30 am to 2:00 pm.

26. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached on (571) 272-3868. The fax phone number for all papers is (571) 273-8300.

27. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.

Art Unit: 2442

/Robert B. Harrell/
ROBERT B. HARRELL
PRIMARY EXAMINER
GROUP 2442